IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the Application:

LISTING OF CLAIMS:

1. (Currently amended) A method in a browser for providing an audibly controlled user interface for a limited communication device, the steps comprising:

receiving speech input information over an interface connection capable of two-way communication with the limited communication device;

generating at least one key chunk of information based on the speech input information;

generating an audio output developed from a response document based on the at least one key chunk of information; and

providing the audio output over the interface connection to the limited communication device in response to generating the audio output;

wherein the step of generating the at least one key chunk of information comprises generating the at least one key chunk of information by an automatic speech recognition module deriving the at least one key chunk of information from the speech input information.

2. (Original) The method of claim 1, wherein the step of generating the audio output comprises:

providing the at least one key chunk of information to a web application; and

receiving the response document from the web application, the response document developed from an application-defining document accessed in

response to the at least one key chunk of information provided to the web application.

3. (Original) The method of claim 1, wherein

the step of receiving the speech input information comprises receiving the speech input information over a telephony connection to the limited communication device; and

the step of providing the audio output over the interface connection comprises providing the audio output over the telephony connection.

4. (Cancelled)

5. (Original) The method of claim 1, wherein the step of receiving the speech input information comprises receiving an input indicating an initial access to the limited communication device.

6. (Original) The method of claim 1, wherein the step of receiving the speech input information comprises receiving at least one of a command for storing data, a command for retrieving data, and a command for placing an outbound telephony call.

7. (Currently amended) A processor-based system for providing an audibly controlled interface for a limited communication device, the processor-based system comprising:

an interface connection capable of two-way communication with the limited communication device; and

a proxy browser in communication with the interface connection; wherein

the interface connection receives speech input information and provides the speech input information to the proxy browser;

the proxy browser generates at least one key chunk of information based on the speech input information;

the proxy browser generates an audio output developed from a response document based on the at least one key chunk of information and provides the audio output to the interface connection; and

the interface connection provides the audio output to the limited communication device; and

an automatic speech recognition module, wherein the automatic speech recognition module derives the at least one key chunk of information from the speech input information received over the interface connection.

8. (Original) The system of claim 7, wherein the proxy browser

provides the at least one key chunk of information to a web application over a network; and

receives a response document over the network from the web application, the response document developed from an application-defining document accessed in response to the at least one key chunk of information provided to the web application.

9. (Original) The system of claim 7, wherein the interface connection is a telephony connection.

10. (Cancelled)

11. (Original) The system of claim 7, wherein the speech input information comprises an input indicating an initial access to the limited communication device.

12. (Original) The system of claim 7, wherein the speech input information comprises at least one of a command for storing data, a command for retrieving data, and a command for placing an outbound telephony call.

13. (Currently amended) A processor-based system for providing an audibly controlled interface for a limited communication device, the processor-based system comprising:

an interface connection capable of two-way communication with the limited communication device; and

means for generating an audio output, the generating means in communication with the interface connection, wherein

the interface connection receives speech input information and provides the speech input information to the generating means;

the generating means generates at least one key chunk of information based on the speech input information;

the generating means generates an audio output developed from a response document based on the at least one key chunk of information and provides the audio output to the interface connection; and

the interface connection provides the audio output to the limited communication device; and

an automatic speech recognition module, wherein the automatic speech recognition module derives the at least one key chunk of information from the speech input information received over the interface connection.

14. (Currently amended) A computer program product that includes a computer readable medium having instructions stored thereon for providing an audibly controlled interface for a limited communication device, such that the instructions, when carried out by a computer, cause

the computer to perform the steps of:

receiving speech input information over an interface connection capable of two-way communication with the limited communication device;

generating at least one key chunk of information based on the speech input information;

generating an audio output developed from a response document based on the at least one key chunk of information; and

providing the audio output over the interface connection to the limited communication device in response to generating the audio output;

wherein the step of generating the at least one key chunk of information comprises generating the at least one key chunk of information by an automatic speech recognition module deriving the at least one key chunk of information from the speech input information.

15. (Currently amended) The computer program product of claim 14, wherein the step of generating the audio output comprises:

providing the at least one key chunk of information to a web application; and

receiving the response document from the web application, the response document developed from an application-defining document accessed in response to the at least one key chunk of information provided to the web application.

16. (Currently amended) A computer program propagated signal product embodied in a propagated medium, having instructions for providing an audibly controlled interface for a limited communication, such that the instructions, when carried out by a computer, cause the computer to perform the steps of:

receiving speech input information over an interface connection capable of two-way communication with the limited communication device;

generating at least one key chunk of information based on the speech input information;

generating an audio output developed from a response document based on the at least one key chunk of information; and

providing the audio output over the interface connection to the limited communication device in response to generating the audio output;

wherein the step of generating the at least one key chunk of information comprises generating the at least one key chunk of information by an automatic speech recognition module deriving the at least one key chunk of information from the speech input information.

17. (Original) The computer program propagated signal product of claim 16, wherein the step of generating the audio output comprises:

providing the at least one key chunk of information to a web application; and

receiving the response document from the web application, the response document developed from an application-defining document accessed in response to the at least one key chunk of information provided to the web application.

18. (Currently amended) A method in a server for providing an audibly controlled user interface for requesting call services over a network, the steps comprising:

accessing an application defining tagged document in response to a request received over the network;

providing a response suitable for audio output based on the application defining tagged document and the request;

receiving at least one key chunk of information over the network based on speech input information based on the response; and

initiating a call service in response to receiving the at least one key chunk of information;

wherein:

the step of accessing the application defining tagged document comprises accessing an extensible markup language document; and

the step of providing the response suitable for audio output based on the application defining tagged document comprises generating the response based on the extensible markup language document.

19. (Cancelled)

20. (Original) The method of claim 18, wherein the step of accessing the application defining tagged document in response to the request received over the network comprises receiving an input indicating an initial access to a limited communication device.

21. (Original) The method of claim 18, wherein the step of accessing the application defining tagged document comprises receiving the request from a proxy browser based on an interface connection between the proxy browser and a limited communication device.

22. (Original) The method of claim 18, further comprising the step of providing a modified application defining tagged document based on dynamically changing modifiable responses in the application defining tagged document in response to the request.

23. (Original) The method of claim 18, further comprising the steps of receiving a modification input and providing a modified application defining tagged document based on dynamically changing modifiable responses in the application defining tagged document based on the modification input.

24. (Currently amended) A processor-based system for providing an audibly controlled interface over a network, the system comprising:

a document database configured for storing a plurality of application defining tagged documents; and

an executable resource in communication with the document database and the network, wherein the executable resource

accesses an application defining tagged document in response to a request received over the network;

provides a response suitable for audio output based on the application defining tagged document and the request;

receives at least one key chunk of information over the network based on speech input information based on the response; and

initiates a call service in response to receiving the at least one key chunk of information;

wherein:

the application defining tagged document is an extensible markup language document; and

the executable resource generates the response based on the extensible markup language document.

25. (Cancelled)

26. (Original) The system of claim 24, wherein the request comprises an input indicating an initial access to a limited communication device.

27. (Original) The system of claim 24, wherein the executable resource receives the request from a proxy browser based on an interface connection between the proxy browser and a limited communication device.

28. (Original) The system of claim 24, wherein the executable resource dynamically changes modifiable responses in the application defining tagged document in response to the request to provide a modified application defining tagged document.

29. (Original) The system of claim 24, wherein the executable resource receives a modification input and the executable resource dynamically changes modifiable responses in the tagged document in response to the modification input to provide a modified tagged document.

30. (Currently amended) A processor-based system for providing an audibly controlled interface over a network, the system comprising:

a document database configured for storing a plurality of application defining tagged documents; and

means for producing a response suitable for audio output, the producing means in communication with the document database and the network, wherein the producing means

accesses an application defining tagged document in response to a request received over the network;

provides a response suitable for audio output based on the application defining tagged document and the request;

receives at least one key chunk of information over the network based on speech input information based on the response; and

initiates a call service in response to receiving the at least one key chunk of information;

wherein:

the application defining tagged document is an extensible markup language document; and

the producing means generates the response based on the extensible markup language document.

31. (Currently amended) A computer program product that includes a computer readable medium having instructions stored thereon for providing an audibly controlled interface over a network, such that the instructions, when carried out by a computer, cause the computer to perform the steps of:

accessing an application defining tagged document in response to request received over the network;

providing a response suitable for audio output based on the application defining tagged document and the request;

receiving at least one key chunk of information over the network based on speech input information based on the response; and

initiating a call service in response to receiving the at least one key chunk of information;

wherein:

the application defining tagged document is an extensible markup language document; and

the producing means generates the response based on the extensible markup language document.

32. (Original) The computer program product of claim 31, wherein:

the step of accessing the application defining tagged document comprises accessing an extensible markup language document; and

the step of providing the response suitable for audio output based on the application defining tagged document comprises generating the response based on the extensible markup language document.

33. (Original) A method in a browser for providing an audibly controlled user interface for requesting call services, the steps comprising:

receiving input information indicating an initial access to a limited communication device over an interface connection capable of two-way communication with the limited communication device;

providing a first request to a web application based on the input information;

providing audio output over the interface connection to the limited communication device based on a response document received from the web application in response to providing the first request; and

providing a second request that specifies a call service to the web

application in response to generating at least one key chunk of information based on speech information received over the interface connection in response to providing the audio output.

34. (Currently amended) A method in an application server, the steps comprising:

receiving a first request over a network for a response for a subscriber;

accessing profile information for the subscriber from a database;

generating a response document having content tags that specify media content and control tags that define playback of the response for the subscriber in an audible form;

receiving a second request over the network including at least one key chunk generated based on a speech command provided by the subscriber based on the response document; and

initiating a call service based on interpretation of the at least one key chunk relative to the profile information and the response; wherein:

the step of receiving a first request comprises receiving a first hypertext transfer protocol (HTTP) request;

the step of accessing profile information comprises accessing profile information from the database based on Internet Protocol (IP);

the step of generating a response document comprises generating a hypertext markup language (HTML) document having extensible markup language (XML) tags; and

the step of receiving the second request comprises receiving a second HTTP request.

35. (Cancelled)

36. (Original) The method of claim 34, wherein the step of initiating a call service comprises initiating an outgoing call to a destination based on interpretation of the at least one key chunk relative to the profile information and the first response.

37. (Previously Presented) The method of claim 1 wherein the browser is configured to retrieve web-based documentation containing markup language on behalf of multiple user devices; wherein the response document is a web page containing a markup language reference to a sound file; and wherein the step of generating the audio output includes the step of:

playing the sound file referenced by the markup language reference contained in the web page in order to generate the audio output.

38. (Previously Presented) The method of claim 37 wherein the step of receiving the speech input includes the step of obtaining an incoming wireless signal from a wireless user device, the wireless signal carrying the speech input; wherein the step of generating the at least one key chunk of information includes the step of parsing the web page to identify the markup language reference to the sound file; and wherein the step of providing the audio output includes the step of transmitting an outgoing wireless signal to the wireless user device, the outgoing wireless signal carrying the audio output.

39. (Previously Presented) The system of claim 7 wherein the browser is configured to retrieve web-based documentation containing markup language on behalf of multiple user devices; wherein the response document is a web page containing a markup language reference to a

sound file; and wherein the audio output includes the sound file referenced by the markup language reference contained in the web page in order to generate the audio output.

40. (Previously Presented) The system of claim 39 wherein the speech input includes an incoming wireless signal from a wireless user device, the wireless signal carrying the speech input; wherein the at least one key chunk of information includes the web page being having been parsed to identify the markup language reference to the sound file; and wherein the audio output includes an outgoing wireless signal to the wireless user device, the outgoing wireless signal carrying the audio output.

41. (Previously Presented) A method in a browser for providing an audibly controlled user interface for a limited communication device, the steps comprising:

receiving speech input information including at least one of an input indicating an initial access to the limited communication device over a telephony connection, a command for storing data, a command for retrieving data, and a command for placing an outbound telephony call;

generating the at least one key chunk of information by an automatic speech recognition module deriving the at least one key chunk of information from the speech input information;

generating an audio output developed from a response document based on the at least one key chunk of information, providing the at least one key chunk of information to a web application and receiving the response document from the web application, the response document developed from an application-defining document accessed in response to the at least one key chunk of information provided to the web application; and

providing the audio output over the telephony connection to the limited communication device in response to generating the audio output.

42. (Previously Presented) A method in a server for providing an audibly controlled user interface for requesting call services over a network, the steps comprising:

accessing an extensible markup language (XML) document in response to a request received over the network from a proxy browser based on an interface connection between the proxy browser and a limited communication device;

providing a response suitable for audio output based on the XML document and the request;

receiving at least one key chunk of information over the network based on speech input information based on the response;

initiating a call service in response to receiving the at least one key chunk of information;

providing a modified application defining tagged document based on dynamically changing modifiable responses in the application defining tagged document in response to the request; and

receiving a modification input and providing a modified XML document based on dynamically changing modifiable responses in the XML document based on the modification input.

43. (New) The system of claim 7, wherein the proxy browser comprises:

a web browser configured for sending and receiving web pages to and from an application server according to a hypertext transfer protocol;

an XML parser operative to parse XML tags appearing within web pages received by the web browser;

a device interface operative to perform basic telephony functions including (detecting an on-hook condition and an off-hook condition of a

user device, and send and receive audio signals to and from the user device; and

a voice resource control configured for selectively implementing hypertext markup language (HTML) and XML tags appearing within the web pages received by the browser based on capabilities of the user device, the capabilities being stored in a device capabilities table which includes for the user device a unique device identifier, a network address selected from (a telephone number and an IP address), and a specification of capabilities of the user device, the specification of capabilities including whether the user device accepts only text data, whether the user device is able to respond to multiple prompts, whether the user device accepts digital audio data or only analog audio data, whether the user device has a microphone for generating analog audio signals, and whether the user device has an analog to digital converter for converting the analog audio signals to digital audio data.

44. (New) The processor-based system according to claim 24,

wherein the document database is operative to store extensible markup language (XML) documents defining a voice web application to be executed by the application server, the XML documents including menu documents, activity documents, decision documents, and application state documents, the menu documents, activity documents, and decision documents being application-defining XML documents that define user-interface and Boolean application logic for the voice web application, the application state document being an XML data record specifying application state and user attribute information for the voice web application during a user session, the application state document being stored in a registry during execution of the voice web application;

and further comprising:

an XML parser configured for parsing the XML documents; and

a runtime environment for execution of the XML documents based on the parsing by the XML parser, such execution including selective execution of a user interface operation, a logic operation, and a procedure call as specified by a parsed XML document.

45. (New) The processor-based system of claim 44, wherein the application runtime environment includes a tag implementation module operative to implement XML tags parsed by the XML parser by performing a selected one of (dynamically generating an XML menu page in response to detecting a menu tag, performing a logical operation in response to a decision tag, fetching an audio file in response to detecting a sound tag).

46. (New) The processor-based system of claim 44 further comprising a set of libraries enabling the application runtime environment to implement procedures specified by the XML documents by issuing function calls to one of a plurality of Internet Protocol (IP)-compliant remote resources.

47. (New) The processor-based system of claim 46, wherein the function calls are issued according to a protocol selected from Internet Message Access Protocol, Lightweight Directory Access Protocol, and Simple Mail Transfer Protocol.